

Abstract

Disasters are not new to the world, but records of the last few years do indicate that they are getting both more frequent and more severe in destructive forces. While everyone is at risk of these increasing events there are those populations that have higher rates of adverse consequences making them more vulnerable to these disasters. Historically Black Colleges and Universities (HBCUs) have long served their communities often specializing in the education and training of some of these vulnerable or at-risk populations. Observationally though, disaster response and recovery planning prior to events is not always seen as a top priority in these institutions as they struggle for resources to maintain their primary mission goals. There currently is no real knowledge to the level of university readiness for response and recovery operations on HBCU campuses as well as any consolidated knowledge on HBCU's ability to help their communities in times of disasters. This foundational research project collected and examined preliminary desk research data of HBCUs in North Carolina, Virginia, South Carolina, Georgia and the Virgin Islands to determine past disaster events and actions affecting these universities. This data was collected in order to answer the question what are the threats from disasters to HBCUs. This is the first part of ongoing research into HBCU disaster efforts conducted by the ECSU Emergency Management program in conjunction with the National HBCU Consortium for EM and CERT.



Fig. 1. Atlanta Journal reported on a dorm fire in 2109 as being the 5th fire on Morris Brown Campus in four years.

Purpose

The extent of risk and vulnerability to disasters to HBCUs is not truly known nor understood. Likewise the potential of HBCU resources to help their community in times of disaster is also not fully understood at this time. Working with the HBCU Consortium of EM and CERT, This collaborative class project has the primary research purpose of examining these two areas. Additionally this project will give students practical experiences in desk research and practice utilizing critical thinking skills in order to determine real world threats and opportunities.

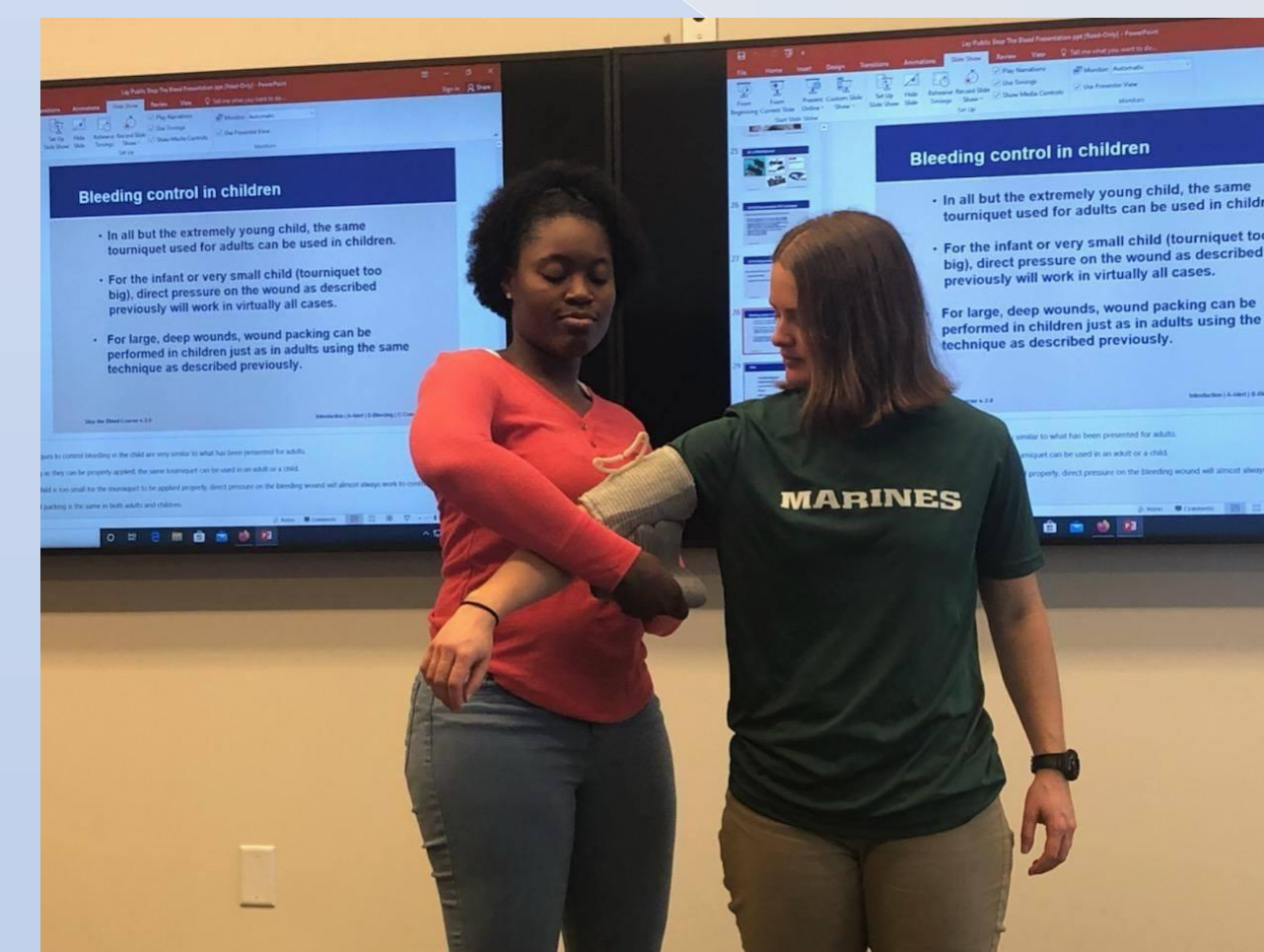


Fig. 2 & 3. ECSU Campus Community Emergency Response Team (CERT) members train to help others in the community. On the left as part of ECSU's COVID Mitigation project they learned how to conduct OSHA/NCDHS respirator fit tests for professionals needing N95 masks. On the right Students are demonstrating to others how to bandage a wound as part of their certified Stop the Bleed Class. In 2020 ECSU EM and CERT students completed more than 600 3rd party credentials.

Methods

Phase I of this collaborative class research project using College Undergraduate Research Experience (CURE) practices, assigned one HBCU to each student to conduct desktop research on demographics, FEMA declared disasters, and a specific literature review using specific phrases in a defined news database. Phase I utilized HBCUs in NC, VA, GA, and the Virgin Islands with the intent to set a baseline for future phases which will include repeating this procedure for HBCUs in other states as well as conducting a questionnaire to all HBCU asking them to self report on their risks and potential for helping in their community.

| State /County | Hurricanes | Severe storms | Flood | Fire | Ice | Snow | Tornado | Biological | Drought | Mud/land slide | Earthquake | all others |
|----------------|------------|---------------|-------|------|-----|------|---------|------------|---------|----------------|------------|------------|
| GA | 13 | 15 | 9 | 12 | 3 | 1 | 13 | 2 | 1 | 0 | 0 | freezing |
| Daughtry | 6 | 5 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 |
| Fulton | 5 | 5 | 0 | 2 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 |
| Peach | 6 | 2 | 1 | 1 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | freezing |
| NC | 31 | 10 | 8 | 5 | 4 | 4 | 4 | 2 | 1 | 1 | 1 | 0 |
| Cabarrus | 7 | 1 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |
| Cumberland | 14 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| Durham | 10 | 2 | 0 | 1 | 3 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| Forsythe | 10 | 0 | 0 | 2 | 4 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| Guilford | 11 | 2 | 0 | 3 | 4 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| Pasquotank | 15 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Rowan | 8 | 0 | 0 | 1 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Wake | 10 | 3 | 0 | 2 | 3 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| South Carolina | 17 | 5 | 2 | 4 | 5 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| Amberg | 9 | 2 | 1 | 0 | 3 | 3 | 0 | 2 | 1 | 0 | 0 | 0 |
| Richland | 11 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Richmond | 4 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| VA | 16 | 17 | 15 | 8 | 1 | 6 | 2 | 2 | 2 | 2 | 1 | 1 |
| Chesterfield | 10 | 2 | 3 | 0 | 1 | 3 | 0 | 2 | 2 | 0 | 0 | 0 |
| Hampton | 12 | 1 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Henrico | 2 | 9 | 2 | 4 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| Norfolk | 10 | 1 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 |
| Virgin Islands | 18 | 6 | 6 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 0 |

Fig. 4. This graph represents an example of some of the HBCUs examined in Phase I and the number of FEMA declared Disasters that occurred in their state and county.

Preliminary Findings

Phase I of this project is still underway through the end of SP 21 semester there are some preliminary findings that are coming to light already. In the demographic reviews of the schools examined in phase I, ECSU was the only HBCU recognized to have an active undergraduate degree in Emergency Management. There were 8 schools identified as having CERT programs at different levels of formation or activity. It was noted that the ECSU CERT program has been working with 3 of these schools on the formation of their CERT programs.

In Respect to FEMA declared disasters it is apparent that the HBCUs examined are in areas of medium to high risk for disasters. The highest of these disaster risks is hurricanes and storms. It should also be noted that while these numbers are already showing high declaration levels, future phases including especially, Texas, Louisiana, Alabama, and Florida are expected to show high declaration number as well.

Initial collection and review of literature review data of the individual universities are showing a trend of damages and risks but more notably it is being noted that damage and efforts by the HBCUs are not being captured in the used news data base. This has caused the student researchers to already question if this could be a potential limitation of this study and more importantly a deterrent to HBCUs receiving disaster support and mitigation/preparedness efforts.

| School | Hurricane | Fire | Flooding | Winter | Earthquake | Tornado | Disaster |
|---------------------------------|-----------|------|----------|--------|------------|---------|----------|
| Clark Atlanta University | 29 | 61 | 13 | 6 | 2 | 5 | 31 |
| Elizabeth City State University | 28 | 24 | 18 | 3 | 1 | 8 | 9 |
| Moorehouse College | 49 | 210 | 37 | 18 | 19 | 41 | 81 |
| NC Central | 15 | 48 | 4 | 7 | | 2 | 34 |
| Norfolk State University | 43 | 105 | 28 | 11 | 1 | 9 | 32 |
| Paine College | 3 | 29 | 1 | 1 | 1 | 1 | 1 |
| Shaw University | 50 | 60 | 24 | 5 | 9 | 132 | 69 |
| Virginia State University | 14 | 8 | 15 | 1 | 1 | 0 | 1 |

Fig. 5. This graph represents an example of the student findings for HBCU in literature review of key disaster terms and how often they showed up in the "US News Stream" Data base.

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| | |
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References

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- US News Stream (2021). Proquest data base Retrieved from <https://search-proquest-com.ecsu1891.idm.oclc.org/usnews>

Contact Information & Acknowledgements

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